



UTAH GOVERNOR'S OFFICE OF  
**ENERGY DEVELOPMENT**

# Advancing State Energy Policy

NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT INTERIM COMMITTEE REPORT

November 17, 2020

**Rob Simmons, Governor's Energy Advisor & Executive Director**







# Our Mission

The Utah Governor's Office of Energy Development advances the Governor's energy vision, implements state energy policy and enhances Utah's energy infrastructure, technology and workforce to provide more affordable, reliable and cleaner energy options for Utah households and businesses.

# Abundant Natural Energy Resources

“We are uniquely positioned in the Western Energy Corridor. Utah has a rich abundance of diverse natural resources, both in terms of traditional fuels, and renewable and alternative energies.”

– **Governor Gary R. Herbert**



# Abundant Natural Energy Resources

- \$15 billion-plus industry
- Over 50,000 high-paying jobs
- Affordable energy to support overall economy
  - Electricity: 10 cents/kWh

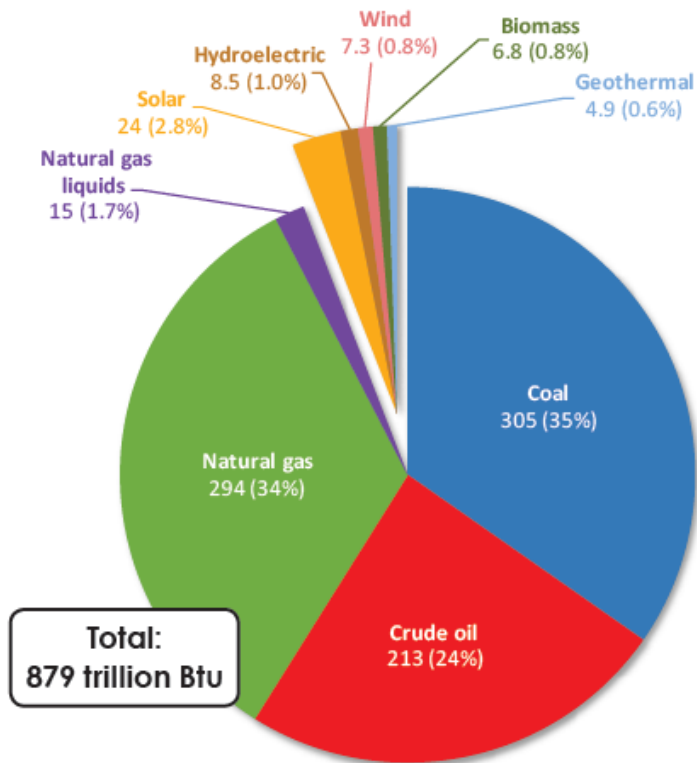


# Utah Energy Mix

Energy Production in Utah by Source

2018

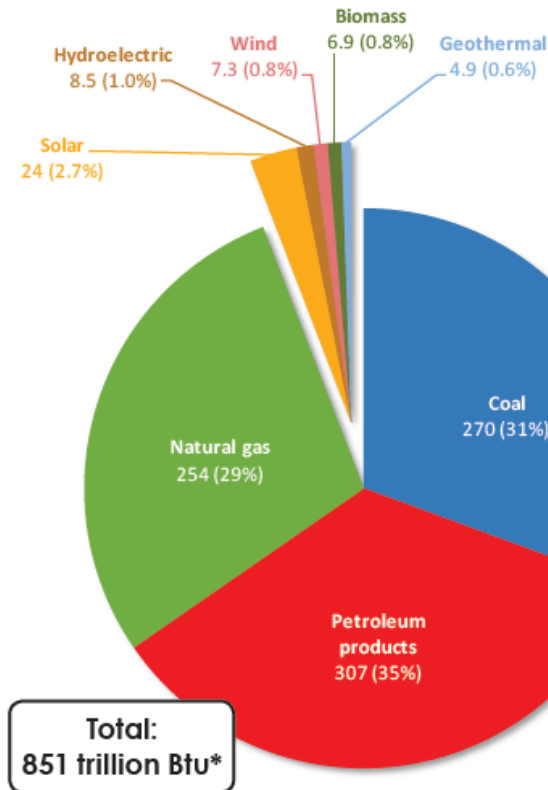
Trillion Btu (Percent of total)



Energy Consumption in Utah by Source

2018

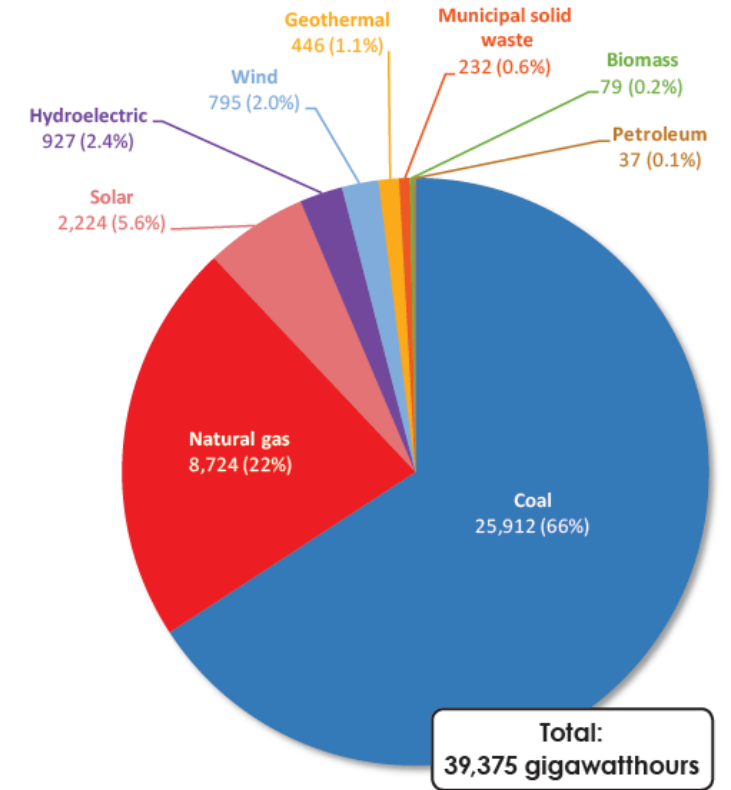
Trillion Btu (Percent of total)



Net Generation of Electricity in Utah by Source

2018

Gigawatthours (Percent of total)



Source: UGS – Utah's Energy Landscape 5<sup>th</sup> Edition Report, 2020.

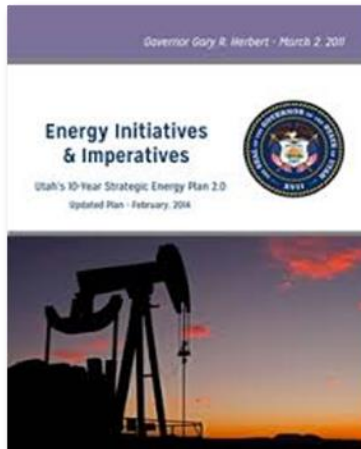
# State Energy Policy 63M-4-301

- Utah shall have/promote adequate, reliable, affordable, sustainable and clean energy resources
- Will promote all-of-the-above development
- Will be conservative in use of incentives
- Will promote infrastructure deployment, conservation & education

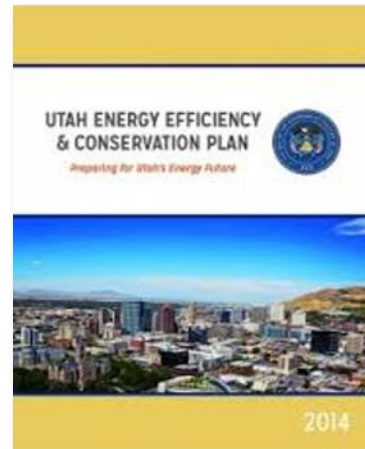
# Strategic Planning for Energy Resource Diversity

Enhancing energy affordability, reliability and the environment

2011 and 2014



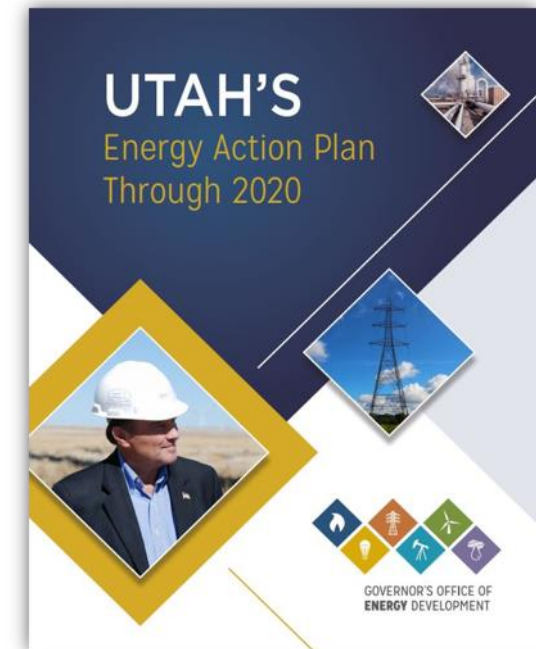
2014



2016



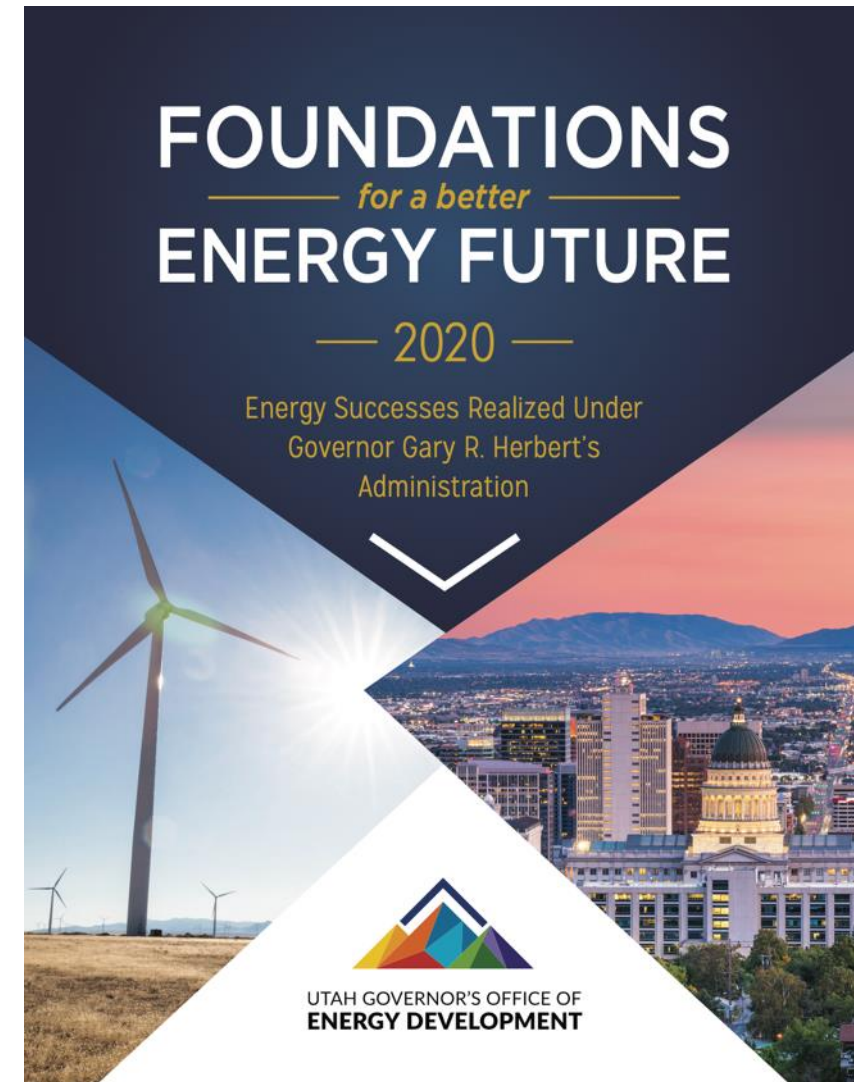
May 2018



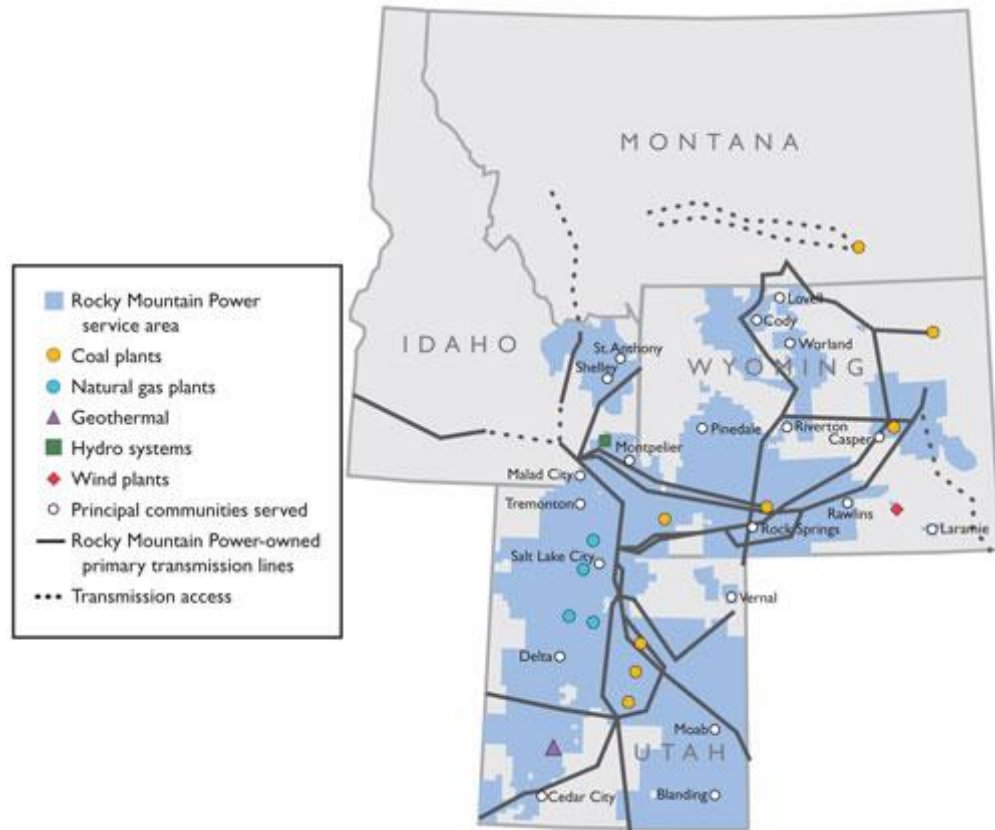


# Foundations for a Better Energy Future

Energy Successes Realized Under  
**Governor Gary R. Herbert's**  
Administration



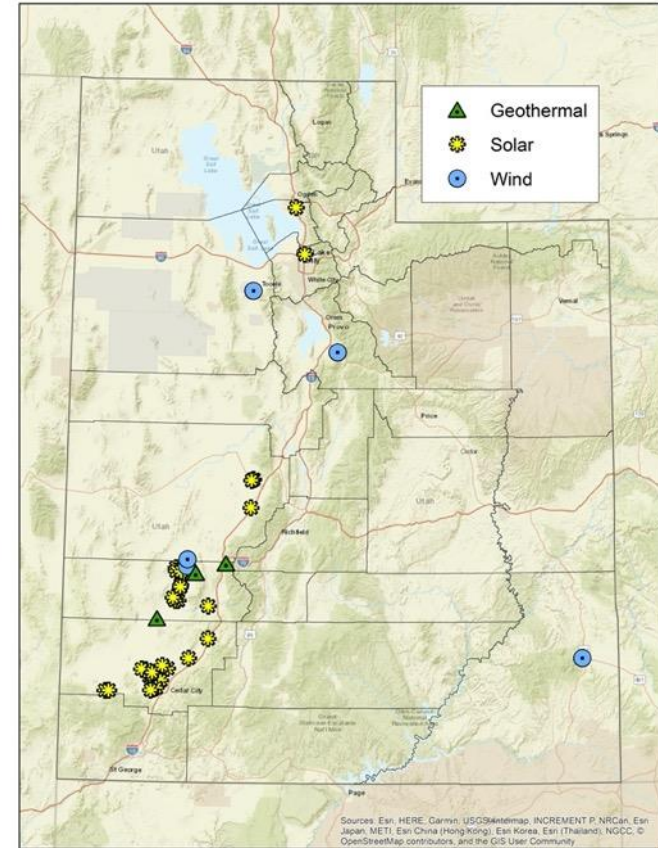
# Promoting Energy Affordability & Reliability



- OED is leading a \$500,000 DOE-funded study of electricity market options in the West with a focus on impact to states.
- OED is leading a \$250,000 State of Utah-funded study of transmission access and capacity in Utah.

# Promoting Rural Power Investment

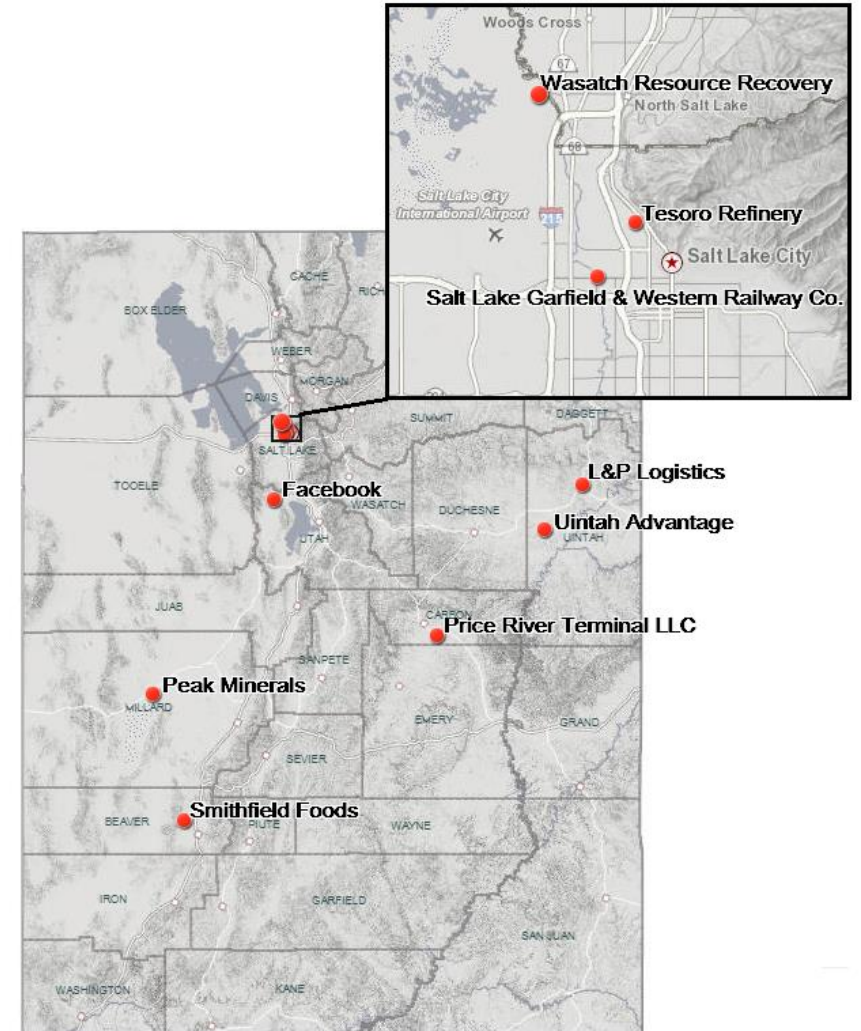
- OED administers Utah's Power Production Tax Credit.
- Completed projects receiving tax credit represent an estimated:
  - \$2 billion invested in rural renewable generation facilities
  - 1000 new megawatts of new renewable power generation





# Promoting Rural Infrastructure Investment

- OED administers Utah's **High Cost Infrastructure Tax Credit (HCITC)**.
- HCITC is available for new projects in: Industrial, Mining, Manufacturing and Agricultural activity
- Approved projects represent an estimated:
  - \$500 million in new infrastructure
  - \$2.5 billion total investment



# Promoting Energy Education & Workforce Development

- K-12 Lesson Plans
- Workforce Development Scholarships
- Education Events
  - Governor's Energy Summit
  - Energy Career Expo
  - Energy & Minerals Day at Stem Fest
- Education Videos



# Promoting Cleaner Fuel Options

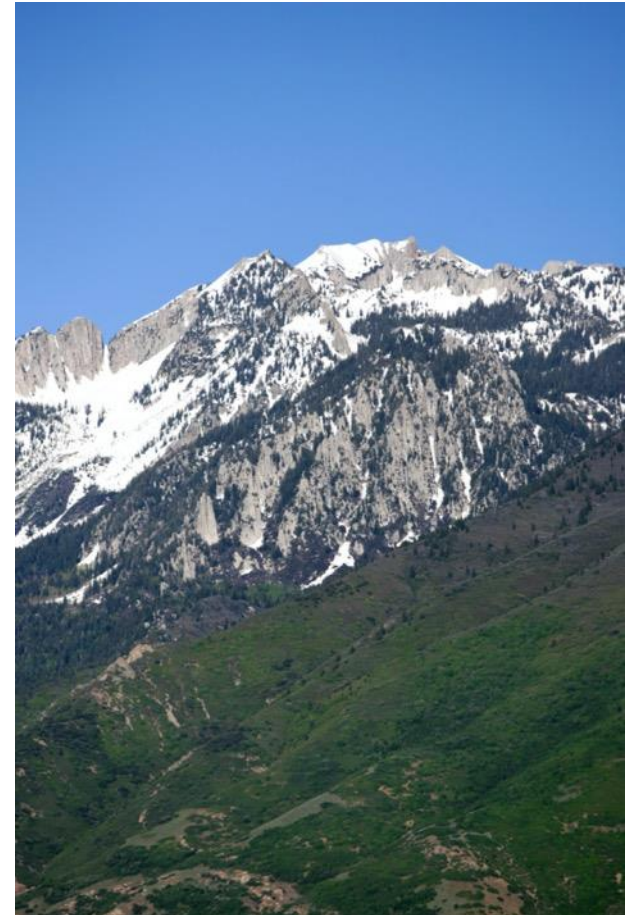
## Tier 3 Fuel Production in Utah

- Reduces emissions in all vehicles, with reductions of up to 80% in newer vehicles
- HCITC incentivizes refinery upgrades
- Chevron, Marathon and Silver Eagle are now producing Tier 3 fuels
  - Holly Frontier committed to producing Tier 3 fuels by the end of the year
- Available now and requires no additional steps or costs for consumers

## Alternative Fuel Vehicles

- 8 western governors signed the REV West MOU focused on regional EV infrastructure development
- OED delivered iRev Report on alt. vehicles and emergency planning efforts

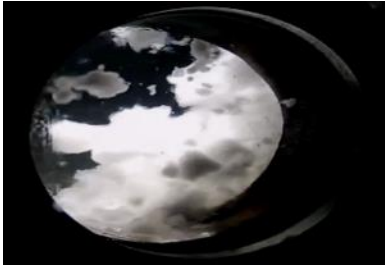
**EPA recently announced Provo & SLC areas are being classified as “in attainment” for the first time in over a decade**



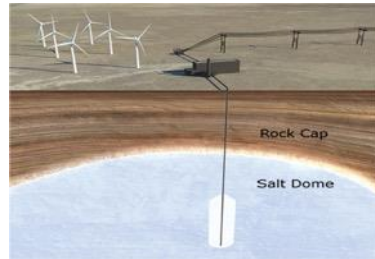


# Driving Technology Investment

Carbon Capture  
and Utilization



Energy Storage



Wireless  
Dynamic Charging



Industrial Combustion  
and Gasification



Hydrogen



Anaerobic Digester



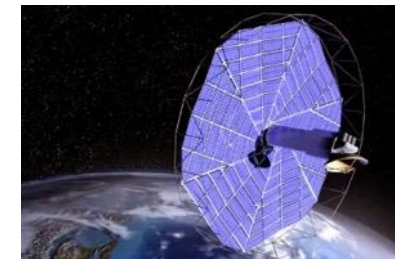
Net Zero Communities



Coal to Carbon Fiber



NASA Origami  
Solar Arrays



Battery Storage



# DOE-Funded Projects and Engagement

## DOE Speakers at Governor's Energy Summit

- Secretary Rick Perry (2019)
- Secretary Ernest Moniz (2018)
- Assistant Secretary Daniel R. Simmons (2019)
- Assistant Secretary Steven Winberg (2019, 2020)

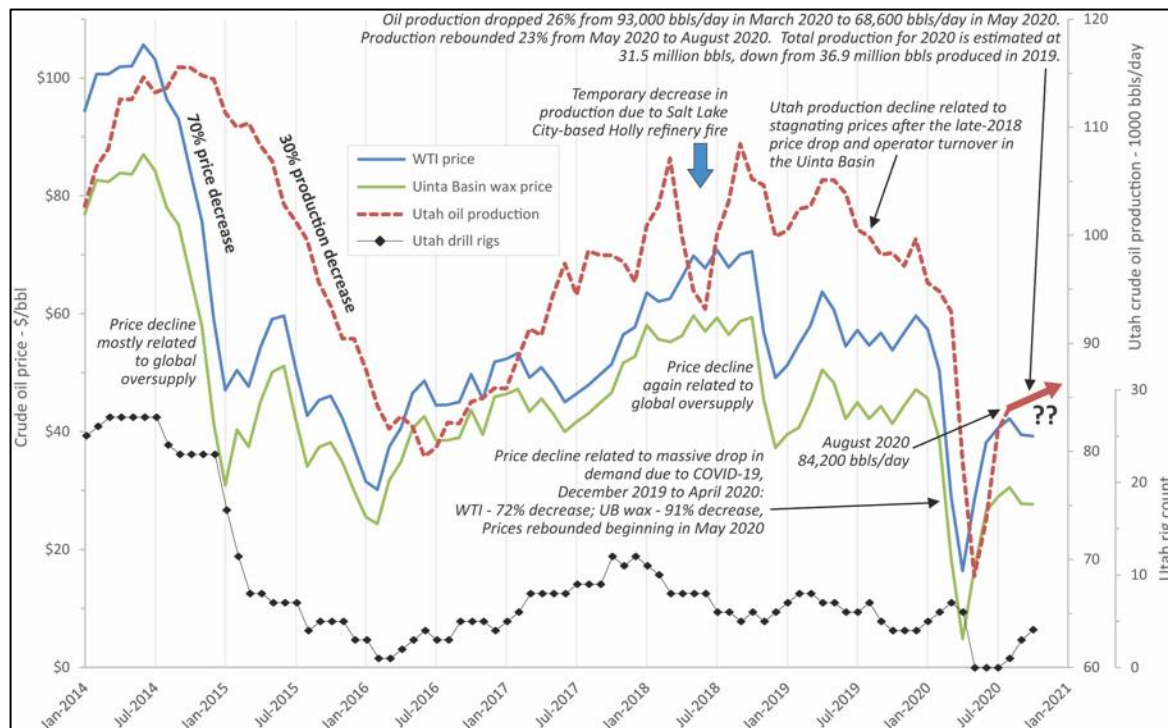


## DOE Investments in Utah

- \$140 million-plus advanced geothermal research
- \$4 million-plus advanced coal research, including coal to carbon fiber
- \$500,000 for technical study of energy markets in the West

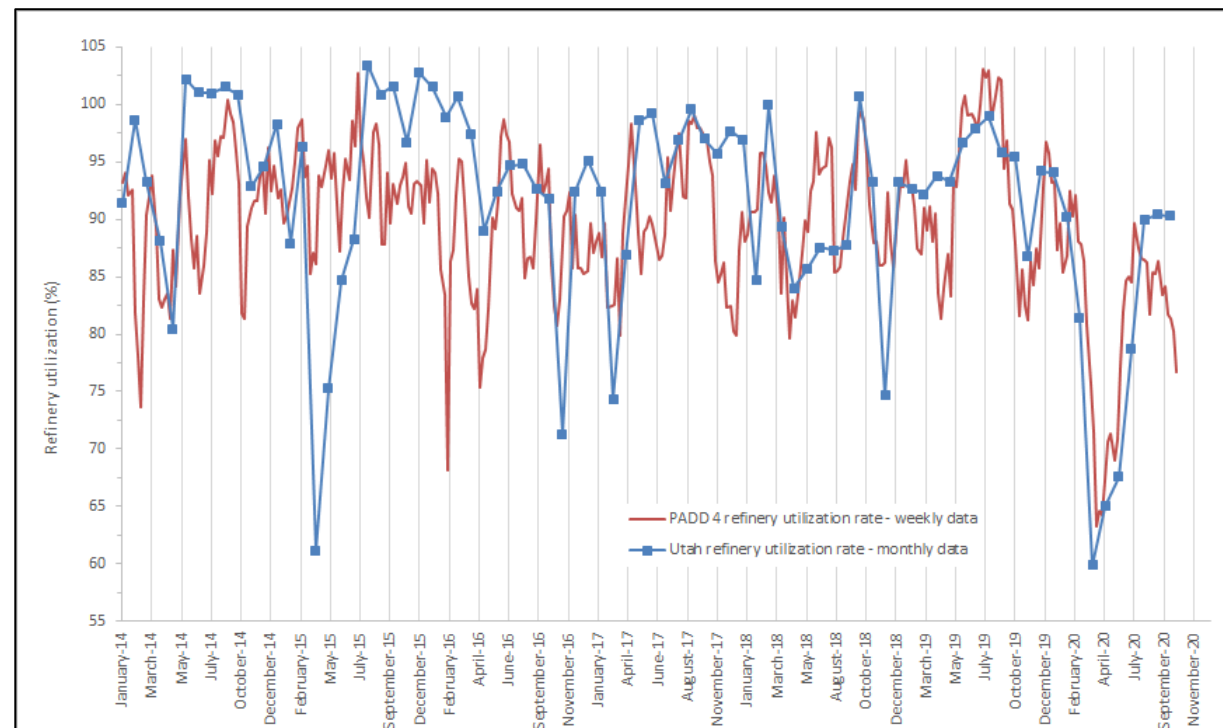
# Covid-19 Energy Impacts

## Monthly Crude Oil Prices And Monthly Utah Oil Production January 2014 to August 2020



Source: Michael Vanden Berg, UGS, Nov. 5, 2020, crude oil prices and Utah oil production representation. With WTI data from EIA, UB Wax data from Big West Oil price bulletins, and production data from the Utah Division of Oil, Gas and Mining.

## Weekly PADD 4 Refinery Utilization Data January 2014 to September 2020



Source: EIA, Rocky Mountain (PADD 4) Refinery Data, with Utah specific data from UGS.



# OED's Covid-19 Response

- Energy Sector Working Groups
- Covid-19 Energy Sector Status Reports
- Covid-19 Resource Information
- \$5 Million Oil & Gas Grant Program with GOED

# State Energy Policy Recommendations 63M-4-301

(1) It is the policy of the state that:

...

- (i) *Utah will promote the development of resources, tools and infrastructure that increase the state's preparation for and ability to respond effectively to significant disruptions to its energy systems and/or fuel supplies.*

...



UTAH GOVERNOR'S OFFICE OF  
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# Thank You!

## Questions?

Learn more at [energy.utah.gov](https://energy.utah.gov) | [rsimmons@utah.gov](mailto:rsimmons@utah.gov)